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EXAMINER

COVINGTON, RAYMOND K

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/582,280
Filing Date: February 20, 2008
Appellant(s): MEERDINK ET AL.

Raymond F. Eich
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 13, 2010 appealing from the Office action mailed October 28, 2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,521,278	O'Brien et al	8-1994
5,236,560	Drysdale et al	3-1992

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien et al US 5521278 and Drysdale et al US 5236560.

Both O'Brien et al and Drysdale et al teach a process for the purification of lactide by condensing the vaporous reaction mixture, removing lactic acid and water as an overhead fraction, removing a higher boiling bottom fraction and a recycling step. See, respectively, column 8 line 60 to column 9 line 18, and, column 4 lines 56-67 with column 5 lines 29-57.

To use somewhat different but otherwise analogous process parameters in an otherwise well-known purification technique would have been obvious to one of ordinary skill in the art as the results, purified product, would not have been unexpected.

(10) Response to Argument

It is noted that the functional equivalent of the rectification column being mounted in relation to the depolymerisation reactor is taught by the cited prior art. See, for example column 2 step E of O'Brien et al where water and lactide are removed as vapor. Also note that condensation is equivalent to appellant's claimed liquification. Further, Steps C, O'Brien et al and (c), appellant's, correspond. That is, the vapor mixture/vapor fraction removed from the reactor is condensed. See, for example column 3 step C lines 18-23. In addition to the above, recycling reaction components back to a reactor is an obvious expedient well-known to a

person of ordinary skill in the chemical arts. Note the well-known definition of a rectification column.

In addition to the above, recycling reaction components back to a reactor is an obvious expedient well-known to a person of ordinary skill in the distillation chemical arts.

Further, with respect to appellant's comments regarding O'Brien et al it is also noted that rectification of the lactide vapor (read distillation condensation and recycling) would occur in a portion of the upper portion of the reaction chamber where the lactide vapor rises through a series of trays. See column 7 lines 31-45. Patentees note that "Though the precise reactor configuration is not critical..[a] vessel having a vapor product outlet at the top of the column ... and a series of distillation trays..." This reads on a rectification column. See also column 8 lines 5-8.

Further, with respect to appellant's comments regarding Drysdale et al it is also noted that rectification reads on distillation, condensation with recycling. Drysdale et al also discloses that cyclic ester (read lactide) can be separated by distillation alone. See paragraph abridging columns 2 and 3. Additionally, Figure 2 represents an integrated distillation system comprising columns and condensers along with a recycle loop. This reads on the claimed rectification step. See column

3 lines 16-22. Patentees also first teach the distillation method and note that condensation is another aspect of the invention. See column 3 line 63 to column 4 line 61. This is additionally true where in Figure 2 overhead lactide vapor is subjected to flash distillation followed by recycling. See column 6 lines 34-50.

That the references teach that the claimed purification can multiply occur within and without the reaction chamber is merely cumulative.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Raymond Covington/

Examiner, Art Unit 1625

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